

OCTOKOPTER-TYPE SYSTEMS FOR REMOTE GAMMA-SPECTROMETRIC SCANNING OF THE EARTH'S SURFACE FROM AIRBORNE VEHICLES



Areas of Application

The onboard equipment is designed for remote detection and mapping of radioactive anomalies, as well as for development of orthophoto maps

Specification

Dimensions, mm	1040 × 1040
Load capacity, kg	<7.5
Velocity with a load of up to 1.5 kg, m/s	<10
Maximum flying time, min	20 – 25
Flying height, m	10 – 300

Characteristics of gamma spectrometric complex:

Dimensions of cylindrical basic detector:	
Height, mm	63
Diameter, mm	63
Weight of basic detector, g	950
Number of basic detectors, pieces	5
Measurement range of equivalent dose rate (EDR), $\mu\text{Sv/h}$	0.1 – 5000
Limit of permissible basic relative error of EDR measurement, %	20
Detection unit dimensions:	
Diameter, mm	300
Length, mm	300
Weight of detection system, kg	7.5

Stage of Development. Suggestions for Commercialization

IRL3, TRL5

Prototype; investment project for joint production; seeking for partners for joint investment project; prototype is provided and tested on the developer's site; search for sales markets in cooperation with investor

IPR Protection

IPR1

Advantages

Low cost, low risk for operators, the ability to capture images at low altitudes near the potentially hazardous objects

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